

AMENDMENTS TO THE CLAIMS

Kindly amend the above application by canceling the claims of record 1 to 5, and substituting new claims 6 to 11 as follows:

Claim 6. An apparatus to determine the position coordinates of a pointer relative to a reference point, comprising:

 a linear acceleration sensor for each axis of said position coordinates;

 an integrator for integrating said linear acceleration into relative position coordinates;

 a discharge switch in parallel with an integrating capacitor in said integrator to discharge the integrating capacitor, said discharge switch being enabled at a rate appropriate for the resolution of said relative position coordinates;

 an analog-to-digital converter to convert said relative position coordinates into digital values; and

 a digital adder to add the last digital value of the relative position coordinates before said discharge switch is enabled, with the first digital value of the relative position coordinates after said discharge switch is disabled,

wherein the output of said digital adder provides the digital position coordinates of said pointer for each axis.

Claim 7. The apparatus of Claim 6 further including a user-operated control that allows said pointer to be moved in space without a corresponding detection of motion.

Claim 8. The apparatus of Claim 6 further including a memory to store said digital position coordinates of said pointer for each axis.

Claim 9. The apparatus of Claim 8 further including a user-operated control that allows said pointer to be moved in space without a corresponding detection of motion.

Claim 10. The apparatus of Claim 6 further including a wireless link to transmit said digital position coordinates of said pointer to a computer for each axis.

Claim 11. The apparatus of Claim 10 further including a user-operated control that allows said pointer to be moved in space without a corresponding detection of motion.